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TITLE: Changing the Attitude and Behaviors of Black Men to

Screening for Prostate Cancer

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The objectives of the project are a) to explore the prevailing attitudes toward screening for prostate cancer among Black men in the Cape Fear region of North Carolina b) to determine the comparative effectiveness of a one-time presentation of information advocating prostate cancer screening to that of repeated presentation of the message, and c) to determine the characteristics and impact of the agent of information delivery on the attitudes and behaviors of Black men toward screening for prostate cancer. The study involves the presentation of uniform messages advocating the benefits of prostate cancer screening to a group of 120 Black men 40 years and older who have never screened for prostate cancer, nor participated in a prostate cancer screening education program. Researchers, health professionals, and peer facilitators will deliver educational messages once to one group, and three times to a second group. The comparison of attitudes before exposure to the messages to that after exposure will help determine the impact of the program on attitudes in the groups. The number of men screened following exposure to the messages will determine the impact of the program on behavior change.

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#### Introduction

This project has been designed on the premise that the attitudes of many Black men to screening for prostate cancer present enormous barriers to the control of the disease among Blacks. The objectives of the project are a) to explore the prevailing attitudes toward prostate cancer screening among Black men in the Cape Fear region of North Carolina b) to determine the comparative effectiveness of a one-time presentation of information advocating prostate cancer screening to that of repeated presentations of the message, and c) to determine the characteristics and impact of the agent of information delivery on the attitudes and behaviors of Black men toward screening for prostate cancer. The design of the study involves the presentation of uniform messages advocating the benefits of prostate cancer screening to a group of 120 black men 40 years and older who have never been screened for prostate cancer, nor participated in a prostate cancer education program. Participants are to be recruited from area black churches, barber shops, community centers, through health and mass media campaigns and with mass mailing of letters to area residents.

Researchers, health professionals, and peer facilitators deliver educational messages once to one group, and three times to a second group. The comparison of attitudes before exposure to the messages to that after exposure is designed to help us determine the impact of the program on attitudes in the groups. Furthermore, the number of men screened following exposure to messages will help determine the impact of the program on behavior change. It will also be possible to determine the relative effectiveness of the agent of the message and its interaction with the frequency of exposure on attitude and behavior change. Findings from this investigation will help researchers, health care professionals, and community leaders determine the important variables in educational programs geared toward changing the attitudes and behaviors of Black men to screening for prostate cancer.

### Body

The recruitment effort for this project was designed to cover the first three months of the project. The principal investigator (PI) was to contact and solicit support from Black churches, pastors and group leaders in these churches. Contacts the PI had already established with some area churches were expected to make a positive contribution toward obtaining support from the Black community. Effort in the first 3 months was also to be geared towards the gathering, and preparation of educational materials to be used in the project. A final version of questionnaire to be used to obtain information about attitudes towards screening for prostate cancer among potential participants was to be developed.

Next, questionnaires were to be administered to all participants. Student research assistants were to be trained to administer the questionnaires in direct interviews. The interviews were to be performed either in the homes of participants or in churches. While the preliminary information on attitudes were being obtained, peer leaders and nurses or other health professional in the different churches were to be identified and trained in how to present educational material on prostate cancer screening.

Between month 7-18, discussions of educational materials were to be conducted in the different churches. While the educational programs were going on, initial data from the interviews were to be coded and analyzed. Preliminary results were expected to be presented and published.

A second direct interview questionnaire was to be administered to all participants between month 19-23. The focus of the second interview was to determine whether participation in the educational activities had brought significant changes in the attitudes of participants toward screening for prostate cancer. It was also to determine whether as a result of the educational activities, respective physicians had screened individual participants for prostate cancer. The coding, analysis of the data, and the publication of findings were to be performed between month 24-30. The results of the project were to be presented to participants not included in the study through seminars and workshops during month 31-36. The data and results from the project were to be made available to interested researchers and community leaders through the publication of brochures and reports, etc.

As outlined in the 2003 report, a number of practical problems with the recruitment of eligible participants made it necessary to drastically revise the timelines originally proposed. An important reason for the delays in the fulfillment of the originally proposed timelines has been the extreme difficulty with the recruitment of participants. It takes several months to recruit and interview eligible participants, in addition to the setting up of educational sessions. It was expected that all the participants would have been interviewed by now, with the collection of follow-up data underway. Unfortunately, the recruitment of participants has been very challenging.

Recruitment efforts have used radio, television, and local papers to advertise the project. We have used our contacts with pastors, deacons, and other church leaders to enlist participants from all known predominantly black churches in Cumberland County. The number of participants enlisted in the project through these avenues has been negligible, however. Although it was anticipated that a majority of the participants would be recruited from Cumberland County, the practical aspects of the project has shown otherwise. The most effective means

through which participants have been recruited has been through mass mailing of letters to all Black men in Cumberland and adjoining counties.

It takes a lot of time and effort to contact the thousands of eligible Black men in towns and counties outside Cumberland County. This process requires the sending of direct mail to potential participants. When eligible participants are identified, our research assistants do direct interviews with the men about their attitudes to prostate cancer screening. These interviews have been conducted without any problems. Most interviews last about 25 minutes, whereas a few last a little longer. Many participants understand the questions and express their opinions without difficulty. Eighty participants have so far been interviewed for their initial attitudes about screening for prostate cancer.

The educational sessions have been conducted for participants who have been interviewed. The principal investigator has conducted two sessions; one involving the one-time presentation of information, and two sessions involving the repetition of messages. A prostate cancer survivor has conducted an educational session for the one-time exposure group, and is on schedule to conduct the first of the sessions involving the repetition of messages on April 2004. A physician member of a church has conducted a session for the one-time exposure group and is waiting to begin the first of three message repetition sessions for another group. A recruitment effort for that group is on going.

Some enlisted participants have not attended the educational sessions. Many participants in the multiple session groups have not attended the follow-up sessions. The most noteworthy problem is that of the numbers that have participated in the educational sessions, only a handful has so far been screened for prostate cancer. The table below summarizes the numbers of participants interviewed.

### One-Time Exposure

Group Educator	Number Interviewed (Initial)	Number Interviewed (Follow-up)	Number Attending Educational Session	Number Screened
Researcher	20	8	12	4
Medical Personnel	20	1	15	5
Survivor	20		13	1

### Repeated Exposure

	Interviews		Educational Sessions			Number Screened
Group Educator	Initial	Follow-up	Session 1	Session 2	Session 3	
Researcher	20	In progress	13	3	TBP	3
Survivor	20	TBP	April 17	TBP	TBP	0
Medical Personnel	In progress	TBP	TBP	TBP	TBP	0

Note: TBP denotes item to be performed.

Data from the initial interviews continue to be entered into the database in preparation for analysis. It is envisaged that all 120 participants would have been interviewed for their initial attitudes by the end of the summer. The completion of that task will make it possible for us to analyze the data and publish findings on the attitudes of black men to screening for prostate cancer.

In sum, the project is making progress, albeit, at a slower pace than originally anticipated toward the fulfillment of the objectives. A major problem is the large amount of time and resources required to enlist participants. I have on many occasions requested for budgeting authority to facilitate the hiring of more research personnel. The hiring of more research personnel is crucial for the completion of the project as outlined. Unfortunately, I have not received any responses to these requests.

As stated in the 2003 report, the proposed March 2004 deadline for the submission of a final report to the project is not feasible. That deadline does not present enough time for all items outlined in the proposal to be completed. Although effort continues to be made to recruit more eligible participants, reaching the number proposed will require a further no-cost extension of the grant period and budget authority to hire more research personnel. Considering that the project was officially begun in October 2001, the proposed deadline for the submission of a final report shortens the grant period (originally stated as 3 years) substantially by several months. An additional no-cost extension of the grant period will be needed to complete the project as proposed.

The revised timelines as outlined in the 2003 report continue to be implemented as follows:

#### Month 1-3

The PI contacts and solicits support from Black churches, pastors and group leaders in these churches. Effort in the first 3 months is also to be geared toward the gathering, and preparation of educational materials to be used in the project. A final version of the questionnaire to be used to obtain information about attitudes towards screening for prostate cancer among potential participants is developed. Peer leaders and nurses or other health professional in the different churches are identified and trained in how to present the materials, and manage the

educational sessions in the respective churches.

#### Month 4-32

Student research assistants administer questionnaires to recruited participants. Groups of 20 men are formed as they are recruited for education sessions to be conducted by designated persons. Discussions of educational materials are to be conducted in the different churches. While the educational programs are going on, initial data obtained on the attitudes questionnaires are to be coded and analyzed. Preliminary results are expected after completion of analysis on the initial interviews. Follow-up interviews are to be conducted for men who have completed their interviews and educational sessions.

### Month 33-36

The coding, analysis of the data, and the publication of findings is proposed. The results of the project will be presented to participants not included in the study through seminars and workshops. The data and results from the project will be made available to other interested researchers through the distribution of brochures, and research reports.

### Key Research Accomplishments

- 1. Eighty black males have been interviewed for their initial attitudes about screening for prostate cancer.
- 2. Educational sessions advocating prostate cancer screening have been conducted for 60 participants who have not previously screened for prostate cancer.
- 3. An additional 20 participants will participate in educational session in April, 2004
- 3. Follow-up interviews are being collected.
- 4. Data from the interviews continue to be prepared for analysis.

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